EXPANDER DEVICE AND METHOD FOR ISOLATING BUS SEGMENTS IN I/O SUBSYSTEM

ABSTRACT OF THE DISCLOSURE

An expander device and method for isolating bus segments from one another in an I/O subsystem. The expander device is arranged to couple the bus segments for communication in the I/O subsystem. The expander device includes a first I/O interface circuit, a second I/O interface circuit, and an expander controller. The first I/O interface circuit is configured to be coupled to a first bus segment and is adapted to interface input and output communication signals with the first bus segment. The second I/O interface circuit is configured to be coupled to a second bus segment and is adapted to interface the input and output communication signals with the second bus segment. The expander controller is coupled to communicate the input and output communication signals between the first and second I/O interface circuits. The expander controller is further arranged to control communication between the bus segments and includes a segment controller adapted to generate a first signal. The segment controller provides the first signal to the first and second I/O interface circuits to disable output of the communication signals from the first and second I/O interface circuits to the first and second bus segments.

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PATENT APPLICATION